

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) In a communications network, a system for providing wireless data service, said system comprising:
 - a) a plurality of mobile stations;
 - b) at least one packet data network;
 - c) a wireless access integrated node directly intermediating between the plurality of mobile stations and at least one packet data network to provide a wired or wireless dedicated broadband connection, said wireless access integrated node having:
 - i) a plurality of mobile data transmission modules and signaling modules for sending, processing, and receiving data packets;
 - ii) a plurality of interfaces and ports for sending messages to and receiving messages from at least one packet data network, systems, and mobile stations interconnected with the wireless access integrated node;
 - iii) a database containing subscription, operating, and charging information for the plurality of mobile stations attached to the wireless access integrated node; and
 - (iv) a main controller to collect charging data and coordinate and control said mobile data transmission modules, signaling modules, interfaces, and databases;
 - d) a radio interface interconnecting the plurality of mobile stations and the wireless access integrated node; and

- e) a network interface interconnecting the wireless access integrated node and at least one packet data network.
2. (Currently Amended) The system of claim 1, wherein the packet data network is comprises the Internet.
 3. (Currently Amended) The system of claim 1, wherein the packet data network is comprises an intranet.
 4. (Currently Amended) The system of claim 3, wherein a content server is attached to the intranet.
 5. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission ~~module is~~ modules comprises a PDCP module.
 6. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission ~~module is~~ modules comprises a RLC/ MAC module.
 7. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission ~~module is~~ modules comprises TRX module.
 8. (Currently Amended) The system of claim 1, wherein the plurality of signaling ~~module is~~ modules comprises Radio Resource Management.
 9. (Currently Amended) The system of claim 1, wherein the plurality of signaling ~~module is~~ modules comprises GPRS Mobility Management.
 10. (Currently Amended) The system of claim 1, wherein the plurality of signaling ~~module is~~ modules comprises Session Management.
 11. (Currently Amended) The system of claim 1, wherein the plurality of interfaces ~~interface is~~ comprises a voice interface.
 12. (Currently Amended) The system of claim 1, wherein the plurality of interfaces ~~interface is~~ comprises a local information system interface.

13. (Currently Amended) The system of claim 1, wherein the plurality of interfaces ~~interface is~~ comprises an appliance control interface.
14. (Currently Amended) The system of claim 1, wherein the plurality of interfaces ~~interface is~~ comprises an intranet gateway.
15. (Currently Amended) The system of claim 1, wherein the plurality of ports ~~port is~~ comprises an RJ11 port for a fixed wire telephone connection.
16. (Currently Amended) The system of claim 1, wherein the system interconnected with the wireless access integrated node ~~is~~ comprises a local information system.
17. (Currently Amended) The system of claim 16, wherein the wireless access integrated node has means for remotely synchronizing a personal digital assistant with its host program on the local information system.
18. (Currently Amended) The system of claim 16, wherein the wireless access integrated node has a voice recognition means for audibly relaying service request commands from the mobile station to the local information system.
19. (Currently Amended) The system of claim 16, wherein the wireless access integrated node has a text-to-speech means for audibly relaying information from the local information service to the mobile station.
20. (Currently Amended) The system of claim 1, wherein the system interconnected with the wireless access integrated node is a local appliance system.
21. (Currently Amended) The system of claim 20, wherein the wireless access integrated node has a voice recognition means for audibly relaying remote control commands from the mobile (station to the application command system).

22. (Currently Amended) The system of claim 20, wherein the wireless access integrated node has a text-to-speech means for audibly relaying an appliance status report delivered from the appliance control system to the mobile station.
23. (Currently Amended) The system of claim 1, wherein the system interconnected with the wireless access integrated node ~~is~~ comprises a wireless data controller.
24. (Currently Amended) The system of claim 1, wherein the radio interface ~~is~~ comprises a GPRS radio interface.
25. (Currently Amended) The system of claim 1, wherein the network interface ~~is~~ comprises an IP interface.
26. (Currently Amended) The system of claim 1, further including means for enabling a mobile station user to obtain a temporary subscription to the wireless access integrated node through a dynamic registration and cancellation process in which user's mobile station's secret subscription identity is linked with the user's mobile station's mobile equipment identity.
27. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for modulating data packets.
28. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for compressing data packets.
29. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for encrypting data packets.
30. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for multiplexing data packets.
31. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for correcting errors in data packets.

32. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for segmenting data packets.
33. (Currently Amended) The system of claim 1, wherein the plurality of mobile data transmission modules includes means for controlling the sequence of data packets.
34. (Currently Amended) The system of claim 1, wherein the wireless access integrated node includes means for supporting mobile stations roaming between a local wireless access integrated node environment and a public mobile network.
35. (Currently Amended) The system of claim 1, wherein the wireless access integrated node includes means for supporting mobile stations roaming between different wireless access integrated node systems.
36. (Currently Amended) The system of claim 1, wherein the wireless access integrated node includes means for providing wireless data services in a community service area located within cells of a public network when the wireless access integrated node is clustered with several other wireless access integrated node systems.
37. (Currently Amended) The system of claim 1, wherein the wireless access integrated node supports mobile stations roaming between different wireless access integrated node systems.
38. (Currently Amended) The system of claim 1, wherein the wireless access integrated node includes means for configuring said wireless access integrated node as a network node where no specified system parameters are present.

39. (Currently Amended) In a communications network, a device for providing access to wireless data services, said device comprising:
- a) a plurality of mobile data transmission modules and signaling modules for sending, processing, and receiving data packets;
 - b) a plurality of interfaces and ports for sending messages to and receiving messages from at least one packet data network, systems, and a plurality of mobile stations interconnected with said device;
 - c) a database containing subscription, operation, and charging information for the plurality of mobile stations attached to said device; and
 - d) a main controller to collect charging data and coordinate and control said mobile data transmission modules, signaling modules, interfaces, port, and database; wherein the device directly intermediating between the plurality of mobile stations and at least one packet data network to provide a wired or wireless dedicated broadband connection.
40. (Currently Amended) The device of claim 39, wherein the packet data network is comprises the internet.
41. (Currently Amended) The device of claim 39, wherein the packet data network is comprises an intranet.
42. (Currently Amended) The device of claim 41, wherein a content server is attached to the internet.
43. (Currently Amended) The device of claim 39, wherein the plurality of mobile data transmission module is modules comprises a PDCP module.
44. (Currently Amended) The device of claim 39, wherein the plurality of mobile data transmission module is modules comprises a RLC/MAC module.

45. (Currently Amended) The device of claim 39, wherein the plurality of mobile data transmission ~~module is~~ modules comprises a TRX module.
46. (Currently Amended) The device of claim 39, wherein the plurality of signaling ~~module is~~ modules comprises a radio resource management module.
47. (Currently Amended) The device of claim 39, wherein the plurality of signaling ~~function is~~ modules comprises a GPRS mobility management module.
48. (Currently Amended) The device of claim 39, wherein the plurality of signaling ~~module is~~ modules comprises a session management module.
49. (Currently Amended) The device of claim 39, wherein the ~~interface is~~ plurality of interfaces comprises a voice interface.
50. (Currently Amended) The device of claim 39, wherein the ~~interface is~~ plurality of interfaces comprises a local information system interface.
51. (Currently Amended) The device of claim 39, wherein the ~~interface is~~ plurality of interfaces comprises an appliance control interface.
52. (Currently Amended) The device of claim 39, wherein the ~~interface is~~ plurality of interfaces comprises an intranet gateway.
53. (Currently Amended) The device of claim 39, wherein the ~~port is~~ plurality of ports comprises an RJ11 port for a fixed wire telephone connection.
54. (Currently Amended) The device of claim 39, wherein the system interconnected with the device ~~is~~ comprises a local information system.
55. (Currently Amended) The device of claim 39, further including a voice recognition subsystem.
56. (Currently Amended) The device of claim 39, further including a text-to-speech synthesis subsystem.

57. (Currently Amended) The device of claim 39₁ wherein the system interconnected with the device ~~is-comprises~~ a local appliance control system.
58. (Currently Amended) The device of claim 39₁ wherein the system interconnected with the device ~~is-comprises~~ a wireless data collector.
59. (Currently Amended) The device of claim 39₁ wherein the plurality of interfaces ~~comprises a radio interface is-including~~ a GPRS radio interface.
60. (Currently Amended) The device of claim 39₁ wherein the plurality of interfaces ~~comprises a network interface is-including~~ an IP interface.
61. (Currently Amended) The device of claim 39₁ wherein the plurality of mobile data transmission modules includes means for modulating data packets.
62. (Currently Amended) The device of claim 39₁ wherein the plurality of mobile data transmission modules includes means for compressing data packets.
63. (Currently Amended) The device of claim 39₁ wherein the plurality of mobile data transmission modules includes means for encrypting data packets.
64. (Currently Amended) The device of claim 39₁ wherein the plurality of mobile data transmission modules includes means for multiplexing data packets.
65. (Currently Amended) The device of claim 39₁ wherein the plurality of mobile data transmission modules includes means for correcting errors in data packets.
66. (Currently Amended) The device of claim 39₁ wherein the plurality of mobile data transmission modules includes means for segmenting data packets.
67. (Currently Amended) The device of claim 39₁ wherein the plurality of mobile data transmission modules includes means for controlling the sequence of data packets.

68. (Currently Amended) The device of claim 39, further including means for configuring said device as network node where no specified system parameters are present.

Claims 69-74 (Cancelled)